

FIG. 1

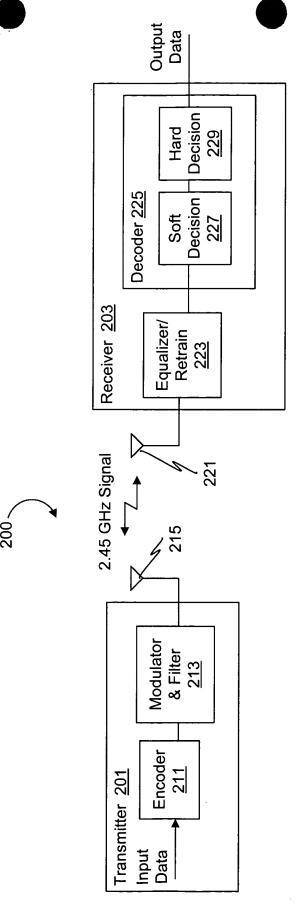
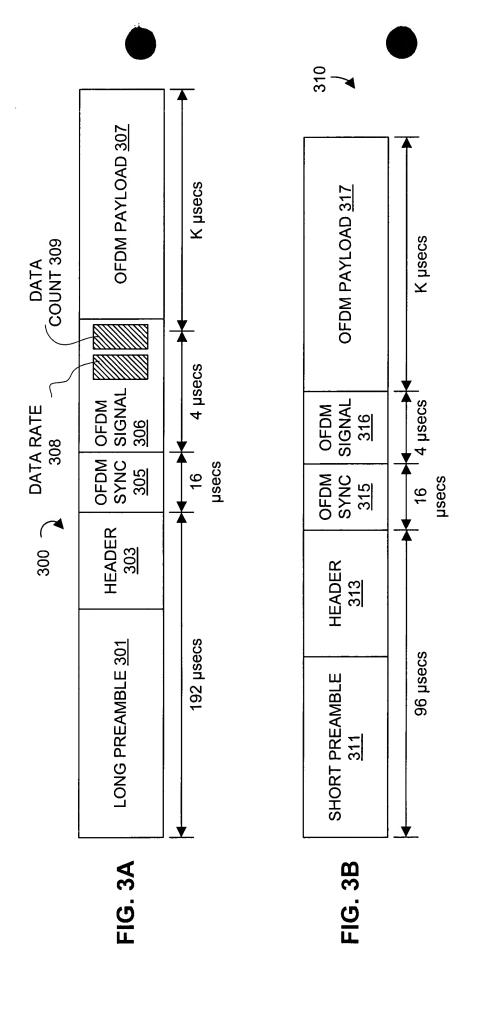
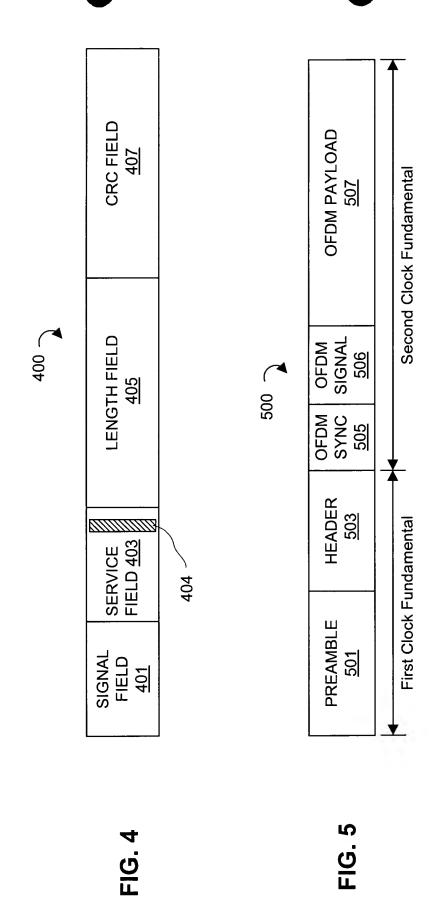


FIG. 2





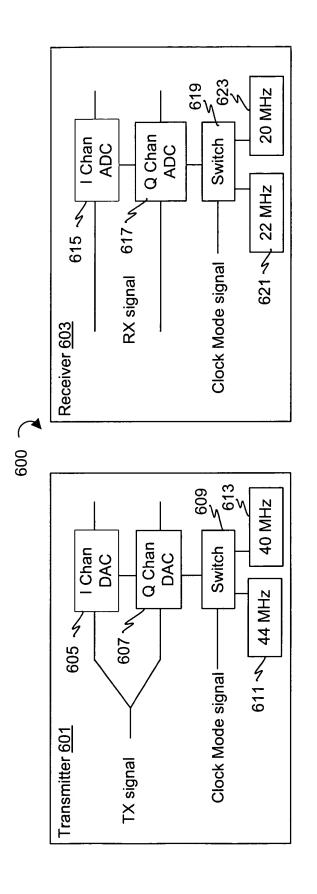


FIG. 6A

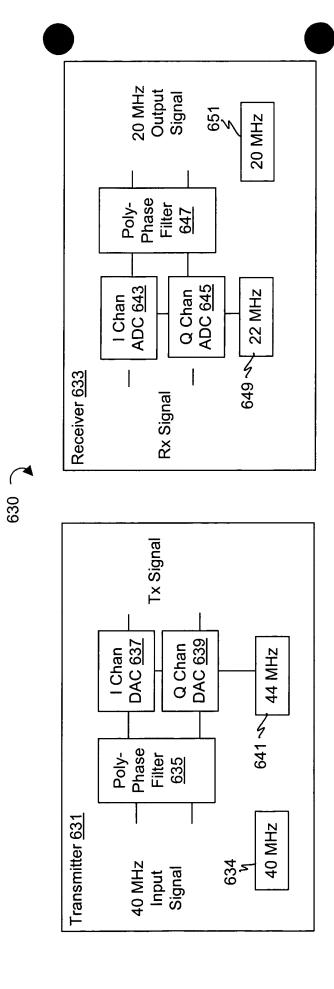


FIG. 6B

C 002

FIG. 7A

OFDM PAYLOAD 707	tal
OFDM SIGNAL 706	Single Clock Fundamental
OFDM SYNC 705	igle Clock
HEADER 7 <u>03</u>	Sir
PREAMBLE 701	

FIG. 7B

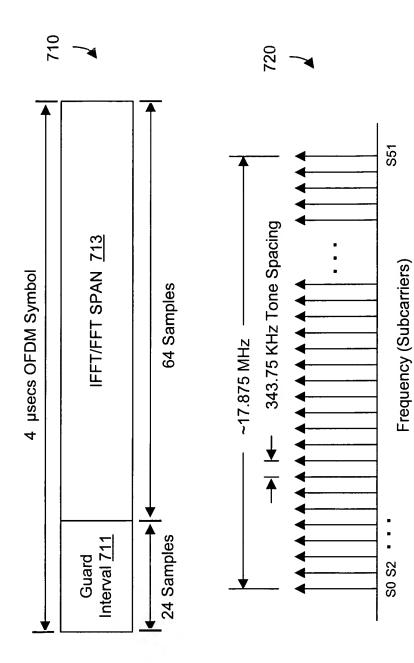
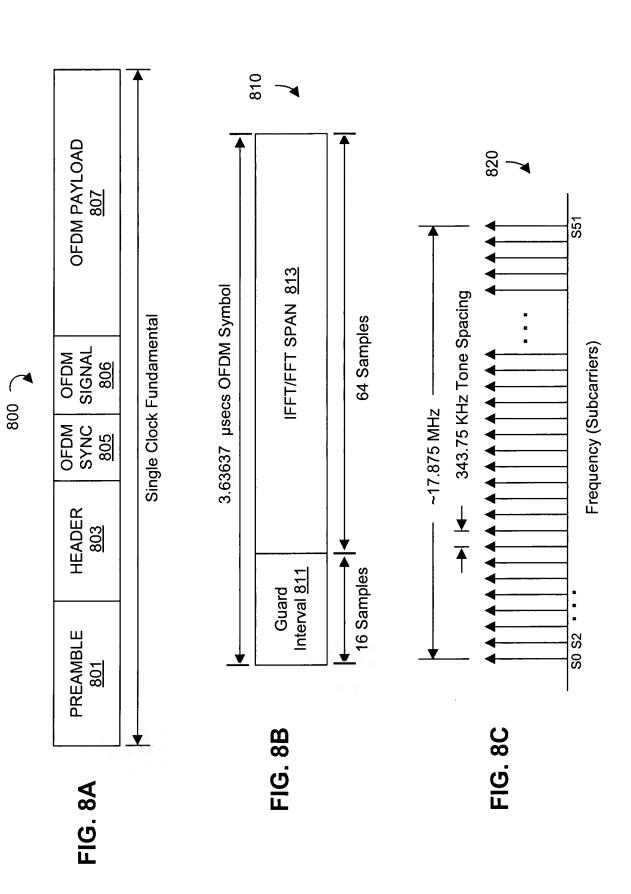


FIG. 7C



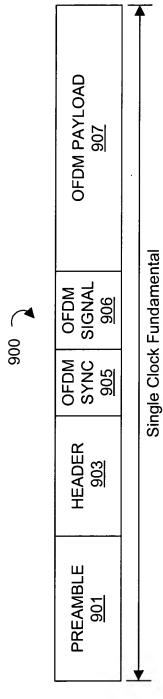
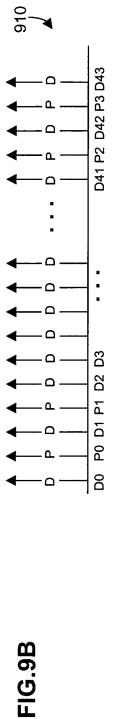


FIG. 9A



Frequency (Subcarriers)

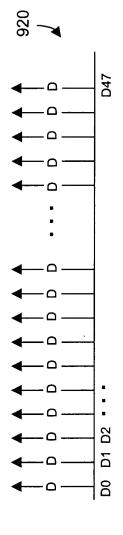
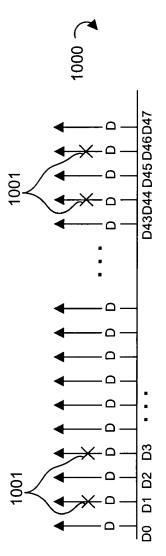


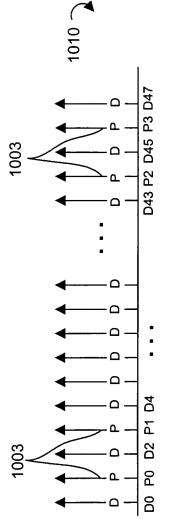
FIG. 9C

Frequency (Subcarriers)

FIG. 10A



Frequency (Subcarriers)



Frequency (Subcarriers)

Comparson of Embodiments	Comments	Clock switch between 20 & 22 MHz	Clock switch not required; Added samples to cyclic extension	802.11a run at 22 MHz; 10% increase in data rates	44 data sub-carriers; Added samples to cyclic extension	48 data sub-carriers; No pilots; Added samples to cyclic extension	Puncture 4 of the 48 data sub-carriers Replace with 4 pilots; Added samples to cyclic extension	44 data sub-carriers 4 pilots	48 data sub-carriers. No pilots.	Puncture 4 of the 48 data sub-carriers Replace with 4 pilots
	Delay Spread Performance (RMS DS) (relative to 802.11a)	802.11a	50% better	10% worse	50% better	50% better	50% better	10% worse	10% worse	10% worse
	ThermalNoise Performance (Eb/No dB) (relative to 802.11a)	same	0.5 dB worse	same	0.5 dB worse	0.5 dB worse	0.9 dB worse	same	same	0.4 dB worse
	Spectral Width (relative to to 802.11a)	same	10% wider	10% wider	0.83% wider	0.83% wider	0.83% wider	0.83% wider	0.83% wider	0.83% wider
	OFDM Symbol Duration (µsecs)	4	4	3.63637	4	4	4	3.63637	3.63637	3.63637
	# Samples FFT	64	64	64	64	64	64	64	64	64
	# Samples Cyclic Ext.	16	24	16	24	24	24	16	16	16
	# of Pilot Tones	4	4	4	4	0	4	4	0	4
	# of Sub- carriers	52	52	52	48	48	48	48	48	48
	Clock Rate (MHz)	20	22	22	22	22	22	22	22	22
	Provided Data Rates (Mbps)	6, 9, 12, 18, 24, 36, 48, 54	6, 9, 12, 18, 24, 36, 48, 54	6.6,9.9,13.2,19.8, 26.4, 39.6, 52.8,59.4	5.5, 8.25, 11, 16.5, 22, 33, 44, 49.5	6, 9, 12, 18, 24, 36, 48, 54	6, 9, 12, 18, 24, 36, 48, 54	6.05, 9.075, 12.1, 18.15, 24.2, 36.3, 48.4, 54.45	6.6, 9.9, 13.2, 19.8, 26.4, 39.6, 52.8, 59.4	6.6, 9.9, 13.2, 19.8, 26.4, 39.6, 52.8, 59.4
	Embod.#	1 (500)	2 (700)	3 (800)	4 (900, 710, 910)	5 (900, 710, 920)	6 (900, 710 1000,1010)	7 (900, 810, 910)	8 (900, 810, 920)	9 (900, 810 1000,1010)

FIG. 11

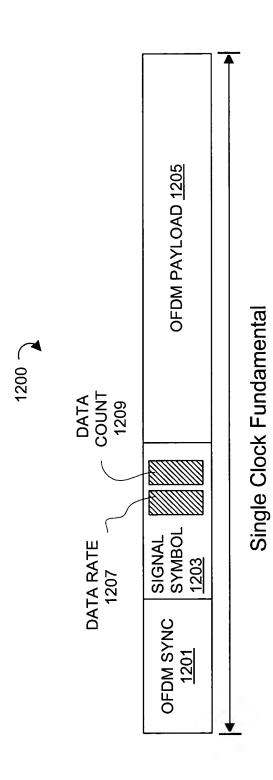


FIG. 12